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| 10/602,880   | 06/25/2003  | Kang Soo Seo         | 1740-000018/US      | 2259             |
| 30593 7590 07/08/2009<br>HARNESS, DICKEY & PIERCE, P.L.C.<br>P.O. BOX 8910<br>RESTON, VA 20195 |             |                      |                     |                  |
| EXAMINER   |             |                      |                     |                  |
| JONES, HEATHER RAE   |             |                      |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/602,880

**Applicant(s)**

SEO ET AL.

**Examiner**

HEATHER R. JONES

**Art Unit**

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 6, 7, 9, 16-18, 20, 21, 23-26, 29, 30, 32, 33 and 37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6, 7, 9, 16-18, 20, 21, 23-26, 29, 30, 32, 33 and 37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-646)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 4/9/09, 4/24/09, 5/19/09
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 25, 2009 has been entered.

### ***Response to Arguments***

1. Applicant's arguments filed April 6, 2009 have been fully considered but they are not persuasive.

The Applicant argues on page 11, line 22 – page 12, line 7 that Sato et al. fails to disclose "a map for the associated clip file, the map containing presentation time information corresponding to address information for the associated clip file". The Examiner respectfully disagrees. Sato et al. discloses in col. 20, lines 22-56 management tables (maps) that store the addresses of the associated clips and other information about the program chains. Amongst the different tables one table specifically titled the VTSPGC information table includes an entry VTS\_PGCI #i. For each of the table entries VTS\_PGCI #i is a data entry expressing the program chain, and comprises j cell playback information blocks C\_PBI #1 - C\_PBI #j, wherein each cell playback information block C\_PBI #j contains the playback sequence of the cell and playback control

information which includes cell presentation time for that particular cell (col. 21, lines 20-31 and col. 22, lines 11-12). The presentation time is represented by the cell presentation time C\_PBTM information (col. 22, lines 11-12). Furthermore, that particular cell's address is also disclosed in the tables. Therefore, Sato et al. meets the claimed limitations and the rejection is maintained.

2. Applicant's arguments with respect to claim 1 regarding the entry point for the associated clip file as well as the new amended limitations have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 6, 7, 9, 16-18, 20, 21, 23-26, 29, 30, 32, 33, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (U.S. Patent 5,884,004) in view of Kato et al. (U.S. Patent Application Publication 2002/0145702).

Regarding claim 1, Sato et al. discloses a computer readable medium having a data structure for managing reproduction of multiple playback path video data of a title, comprising: a data area storing at least one clip file of the video data having multiple playback paths for each title, the clip file being associated with one of the playback paths (Fig. 21; col. 6, lines 65-67); and a

management area storing management information for managing reproduction of the video data having multiple playback paths for each title, the management information including an information file associated with each clip, each information file providing a map for the associated clip file, the map mapping a presentation time stamp to a corresponding source packet address of the associated clip file (Figs. 20-24, 49, and 50; col. 6, lines 60-64; col. 20, lines 22-56 - management tables (maps) store the addresses of the associated clips). However, Sato et al. fails to disclose a map including at least one entry point for an associated clip file in the playback path; and a playlist directory area storing at least one playlist file including at least one playitem, the playitem identifying at least one playing interval of the clip file, the playitem including identification information identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem, the playlist file indicating one of the multiple playback paths associated with the clip file.

Referring to the Kato et al. reference, Kato et al. discloses a computer readable medium having a data structure for managing reproduction of video data having multiple playback paths for each title, comprising: a map including at least one entry point for an associated clip file in the playback path (Fig. 30 - EP\_map - entry point map); and a playlist directory area storing at least one playlist file including at least one playitem, the playitem identifying at least one playing interval of the clip file, the playitem including identification information

identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem, the playlist file indicating one of the multiple playback paths associated with the clip file (Fig. 25; paragraphs [0253]-[0264]).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to have included an entry point map as well as a playlist directory as described by Kato et al. in the computer readable medium as disclosed by Sato et al. in order to easily locate the next clip file to be played thereby not creating a lag in the video presentation.

Regarding claim 2, Sato et al. in view of Kato et al. discloses all limitations as previously discussed with respect to claim 1 including that a group of playlist files is associated with each playback path (Sato et al.: Figs. 20-24 – shows different playback paths).

Regarding claim 6, Sato et al. in view of Kato et al. discloses all limitations as previously discussed with respect to claim 1 including that the navigation information in a navigation information in a navigation area, the navigation information managing the playlist file to be reproduced (Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim 7, Sato et al. in view of Kato et al. discloses all limitations as previously discussed with respect to claims 1 and 6 including that the different playback paths are related to different stories (Sato et al.: Fig. 21 - different scenarios).

Regarding claim **9**, Sato et al. in view of Kato et al. discloses all limitations as previously discussed with respect to claim 1 including that the data area stores a plurality of clip files of the video data having multiple playback paths, and the video data for each playback path is stored in a different clip file (Sato et al.: col. 6, lines 60-65).

Regarding claim **16**, Sato et al. discloses a method of video data having multiple playback paths for each title from a recording medium, comprising: receiving user input selecting one of playback paths (col. 32, line 56 – col. 33, line 16); reproducing at least the playlist file associated with the selected playback path based on navigation information recorded on the recording medium (Figs. 18, 20-24, and 30; col. 21, lines 12-19; col. 22, lines 23-33); reproducing at least the clip file of the video data having multiple playback paths from the recording medium (col. 32, line 56 - col. 33, line 16); and reproducing management information for managing reproduction of the video data having multiple playback paths from a management area of the recording medium, the management information including an information file associated with each clip, each information file providing a map for the associated clip file, the map mapping a presentation times stamp to a corresponding source packet address of the associated clip file, the playitem including the identification information for the clip file (Figs. 20-24, 49, and 50; col. 6, lines 60-64; col. 20, lines 22-56 - management tables (maps) store the addresses of the associated clips). However, Sato et al. fails to disclose a map including at least one entry point for

an associated clip file in the playback path; and a playlist directory area storing at least one playlist file including at least one playitem, the playitem identifying at least one playing interval of the clip file, the playitem including identification information identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem, the playlist file indicating one of the multiple playback paths associated with the clip file.

Referring to the Kato et al. reference, Kato et al. discloses a computer readable medium having a data structure for managing reproduction of video data having multiple playback paths for each title, comprising: a map including at least one entry point for an associated clip file in the playback path (Fig. 30 - EP\_map - entry point map); and a playlist directory area storing at least one playlist file including at least one playitem, the playitem identifying at least one playing interval of the clip file, the playitem including identification information identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem, the playlist file indicating one of the multiple playback paths associated with the clip file (Fig. 25; paragraphs [0253]-[0264]).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to have included an entry point map as well as a playlist directory as described by Kato et al. in the method as disclosed by Sato



et al. in order to easily locate the next clip file to be played thereby not creating a lag in the video presentation.

Regarding claim **17**, Sato et al. in view of Kato et al. discloses all limitations as previously discussed with respect to claim 16 including that the reproducing step reproduces a group of playlist files based on the navigation information (Sato et al.: col. 32, line 56 - col. 33, line 16).

Regarding claim **18**, Sato et al. discloses a method of recording a data structure for managing reproduction of at least video data on a recording medium, comprising: recording a playlist directory including at least one playlist file in a playlist directory area of the recording medium (col. 6, lines 60-64; col. 20, lines 22-56; col. 21, lines 12-15), the playlist file for identifying a portion of video data having multiple playback paths for each title (Figs. 18, 20-24, and 30; col. 21, lines 12-19; col. 22, lines 23-33); recording at least one clip file of the multiple playback path video data in a data area of the recording medium, the clip being associated with one of the playback paths (col. 6, lines 60-65); and recording management information for managing reproduction of the multiple playback path video data in a management area of the recording medium, the management information including an information file associated with each clip, each information file providing a map for the associated clip file, the map containing presentation time stamp to a corresponding source packet address of the associated clip file, the playlist including identification information identifying the information file associated with the clip file (Figs. 20-24, 49, and 50; col. 6,

lines 60-64; col. 20, lines 22-56 - management tables (maps) store the addresses of the associated clips). However, Sato et al. fails to disclose a map including at least one entry point for an associated clip file in the playback path; and a playlist directory area storing at least one playlist file including at least one playitem, the playitem identifying at least one playing interval of the clip file, the playitem including identification information identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem, the playlist file indicating one of the multiple playback paths associated with the clip file.

Referring to the Kato et al. reference, Kato et al. discloses a computer readable medium having a data structure for managing reproduction of video data having multiple playback paths for each title, comprising: a map including at least one entry point for an associated clip file in the playback path (Fig. 30 - EP\_map - entry point map); and a playlist directory area storing at least one playlist file including at least one playitem, the playitem identifying at least one playing interval of the clip file, the playitem including identification information identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem, the playlist file indicating one of the multiple playback paths associated with the clip file (Fig. 25; paragraphs [0253]-[0264]).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to have included an entry point map as well as a

playlist directory as described by Kato et al. in the method as disclosed by Sato et al. in order to easily locate the next clip file to be played thereby not creating a lag in the video presentation.

Regarding claim **20**, Sato et al. discloses an apparatus for recording a data structure for managing reproduction of at least video data having multiple playback paths for each title, comprising: an optical pickup (1200) configured to record data on a recording medium (Fig. 2); and a controller (200 and 1200), operably coupled to the optical pickup, configured to control the optical pickup to record at least one clip file of the encoded video data in a data area on the recording medium, the clip file being associated with one of the playback paths (Figs. 18, 20-24, and 30; col. 6, lines 60-64; col. 20, lines 22-56; col. 21, lines 12-19; col. 22, lines 23-33), the controller configured to control the optical pickup to record a playlist directory including a plurality of playlist files each including at least one playitem in a playlist directory area of the recording medium, each playlist file for identifying a portion of the video data, the controller configured to control the optical pickup to record management information for managing reproduction of the encoded video data in a management area of the recording medium, the management information including an information file associated with each clip file, the map mapping presentation time stamp to a corresponding source packet address of the associated clip file, the playitem including identification information identifying the information file associated with the clip file (Figs. 20-24, 49, and 50; col. 6, lines 60-64; col. 20, lines 22-56 -

management tables (maps) store the addresses of the associated clips; col. 22, lines 11-12). However, Sato et al. fails to disclose a map including at least one entry point for an associated clip file in the playback path; and a playlist directory area storing at least one playlist file including at least one playitem, the playitem identifying at least one playing interval of the clip file, the playitem including identification information identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem, the playlist file indicating one of the multiple playback paths associated with the clip file.

Referring to the Kato et al. reference, Kato et al. discloses a computer readable medium having a data structure for managing reproduction of video data having multiple playback paths for each title, comprising: a map including at least one entry point for an associated clip file in the playback path (Fig. 30 - EP\_map - entry point map); and a playlist directory area storing at least one playlist file including at least one playitem, the playitem identifying at least one playing interval of the clip file, the playitem including identification information identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem, the playlist file indicating one of the multiple playback paths associated with the clip file (Fig. 25; paragraphs [0253]-[0264]).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to have included an entry point map as well as a

playlist directory as described by Kato et al. in the apparatus as disclosed by Sato et al. in order to easily locate the next clip file to be played thereby not creating a lag in the video presentation.

Regarding claim **21**, Sato et al. discloses an apparatus for reproducing a data structure for managing reproduction of at least video data having multiple playback paths for each title, comprising: an optical pickup (2004) configured to reproduce data recorded on a recording medium (Fig. 3); and a controller (2002), operably coupled to the optical pickup, configured to control the optical pickup to reproduce at least one playlist file in a playlist directory area of the recording medium (Figs. 18, 20-24, and 30; col. 6, lines 60-64; col. 20, lines 22-56; col. 21, lines 12-19; col. 22, lines 23-33), the playlist file for identifying a portion of the video data (Figs. 18, 20-24, and 30; col. 20, lines 23-53; col. 21, lines 12-19; col. 22, lines 23-33); the controller configured to control the optical pickup to reproduce at least one clip file of the at least video data from a data area of the recording medium, the clip file being associated with one of the playback paths (col. 6, lines 60-65; col. 32, line 56 - col. 33, line 16); the controller configured to control the optical reproducing unit to reproduce management information for managing reproduction of the at least video data in a management area of the recording medium, the management information including an information file associated with each clip, each information file providing a map for the associated clip file, the map mapping presentation time stamp to a corresponding source packet address of the associated clip file, the

playitem including identification information identifying the information file associated with the clip file (Figs. 20-24, 49, and 50; col. 6, lines 60-64; col. 20, lines 22-56 - management tables (maps) store the addresses of the associated clips). However, Sato et al. fails to disclose a map including at least one entry point for an associated clip file in the playback path; and a playlist directory area storing at least one playlist file including at least one playitem, the playitem identifying at least one playing interval of the clip file, the playitem including identification information identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem, the playlist file indicating one of the multiple playback paths associated with the clip file.

Referring to the Kato et al. reference, Kato et al. discloses a computer readable medium having a data structure for managing reproduction of video data having multiple playback paths for each title, comprising: a map including at least one entry point for an associated clip file in the playback path (Fig. 30 - EP\_map - entry point map); and a playlist directory area storing at least one playlist file including at least one playitem, the playitem identifying at least one playing interval of the clip file, the playitem including identification information identifying the information file associated with the clip file, the playlist file storing connection information between a previous playitem and a current playitem, the playlist file indicating one of the multiple playback paths associated with the clip file (Fig. 25; paragraphs [0253]-[0264]).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to have included an entry point map as well as a playlist directory as described by Kato et al. in the apparatus as disclosed by Sato et al. in order to easily locate the next clip file to be played thereby not creating a lag in the video presentation.

Regarding claim **23**, Sato et al. in view Kato et al. discloses all limitations as previously discussed with respect to claim **20** including that a group of playlist files is associated with each playback path (Figs. 20-24 – shows different playback paths).

Regarding claim **24**, Sato et al. in view of Kato et al. discloses all limitations as previously discussed with respect to claims **20** and **23** including that the navigation information is stored in a navigation area, the navigation information for managing the playlist file (Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim **25**, Sato et al. in view of Kato et al. discloses all limitations as previously discussed with respect to claim **21** including that a group of playlist files is associated with each playback path (Kato et al.: Figs. 20-24 – shows different playback paths).

Regarding claim **26**, Sato et al. in view of Kato et al. discloses all limitations as previously discussed with respect to claims **21** and **25** including that the navigation information is stored in a navigation area, the navigation

information for managing the playlist file (Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim **29**, Sato et al. in view of Kato et al. discloses all limitations as previously discussed with respect to claim 16 including reproducing navigation information stored in a navigation area, the navigation information for managing the playlist file (Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim **30**, Sato et al. in view of Kato et al. discloses all limitations as previously discussed with respect to claim 18 including that reproducing at least one playlist file reproduces a group of playlist files based on the navigation information (Sato et al.: col. 6, lines 60-67; col. 20, lines 22-56; col. 21, lines 12-15).

Regarding claim **32**, Sato et al. in view of Kato et al. discloses all limitations as previously discussed with respect to claim 18 recording navigation information for managing the playlist file (Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim **33**, Sato et al. in view of Kato et al. discloses all limitations as previously discussed with respect to claim 19 including that the recording the at least one playlist file records a group of playlist files based on the navigation information (Sato et al.: col. 6, lines 60-67; col. 20, lines 22-56; col. 21, lines 12-15; Kato et al.: Fig. 25; paragraphs [0253]-[0264]).

Regarding claim **37**, Sato et al. in view of Kato et al. discloses all limitations as previously discussed with respect to claim 1 including that the at



least one clip file is linked to more than one of the plurality of playlist files (Sato et al.: Fig. 21).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEATHER R. JONES whose telephone number is (571)272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Heather R Jones  
Examiner  
Art Unit 2621

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HRJ  
July 2, 2009

/Thai Tran/  
Supervisory Patent Examiner, Art Unit 2621